



## Syphilis+HIV in SD

*Q2 of 2023 versus Q1 of 2023*

*8/23/2023*

# Syphilis in SD

- Early syphilis comprises of primary, secondary, and early non-primary non-secondary cases
- The cases included in this analysis:
  - Disease status: Confirmed and probable
  - Investigation status: Completed
  - SD residents only
- Data were extracted on July 13th, 2023
- Report compares Q2 of 2023 (Apr 1 – Jun 30, 2023) to Q1 of 2023 (Jan 1 – Mar 31, 2023)



# Comparing total number of cases

## Previous quarter

- Number of early syphilis cases: 362
- Number of congenital cases: 18

## Current quarter

- Number of early syphilis cases: 240
- Number of congenital cases: 7

Percent increase/decrease from the previous quarter

Early syphilis: -34%↓

Congenital: -61.2%↓



# Comparing gender

## Previous quarter

▣ 191 (53%) were Females

## Current quarter

▣ 125 (52%) were Females

Provisional data



# Comparing race

## Previous quarter

- 306 (85%) American Indians
- 34 (9%) Whites

## Current quarter

- 209 (87%) American Indians
- 20 (8%) Whites



# Comparing age

## Previous quarter

- 29 (8%) were in the group of 15-19 years old
- 41 (11%) were in the group of 20-24 years old
- 220 (61%) were in the group of 25-39 years old
- 38 (19%) were in the group of 40-64 years old
- Median age: 31 years

## Current quarter

- 23 (10%) were in the group of 15-19 years old
- 37 (15%) were in the group of 20-24 years old
- 140 (58%) were in the group of 25-39 years old
- 39 (16%) were in the group of 40-64 years old
- Median age: 31 years



# Comparing treatment rates

## Previous quarter

▣ 318 (96%) have been treated

## Current quarter

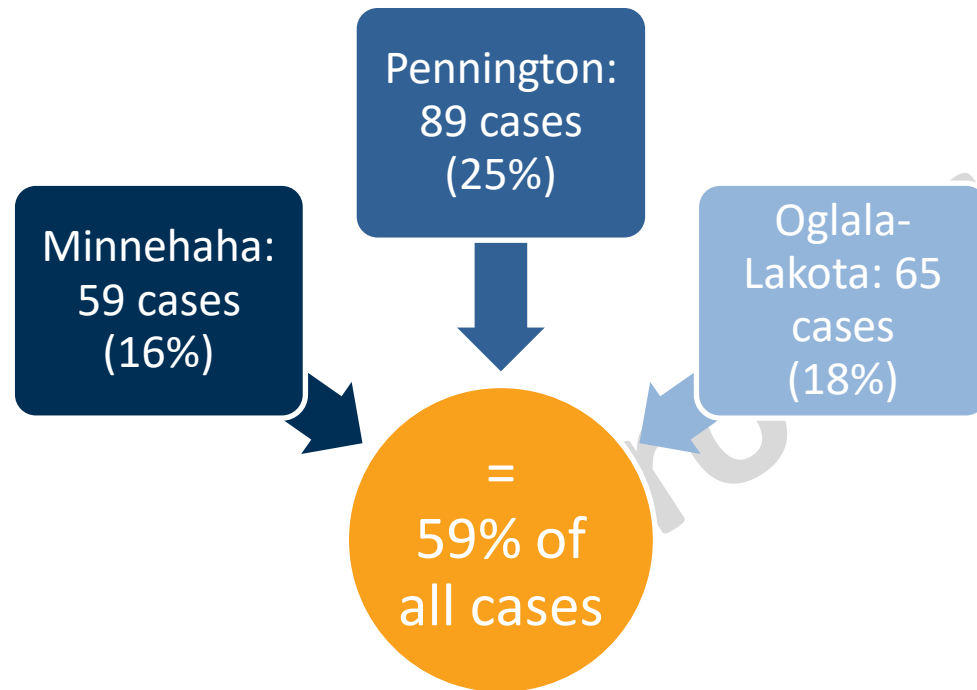
▣ 218 (95%) have been treated

Provisional data

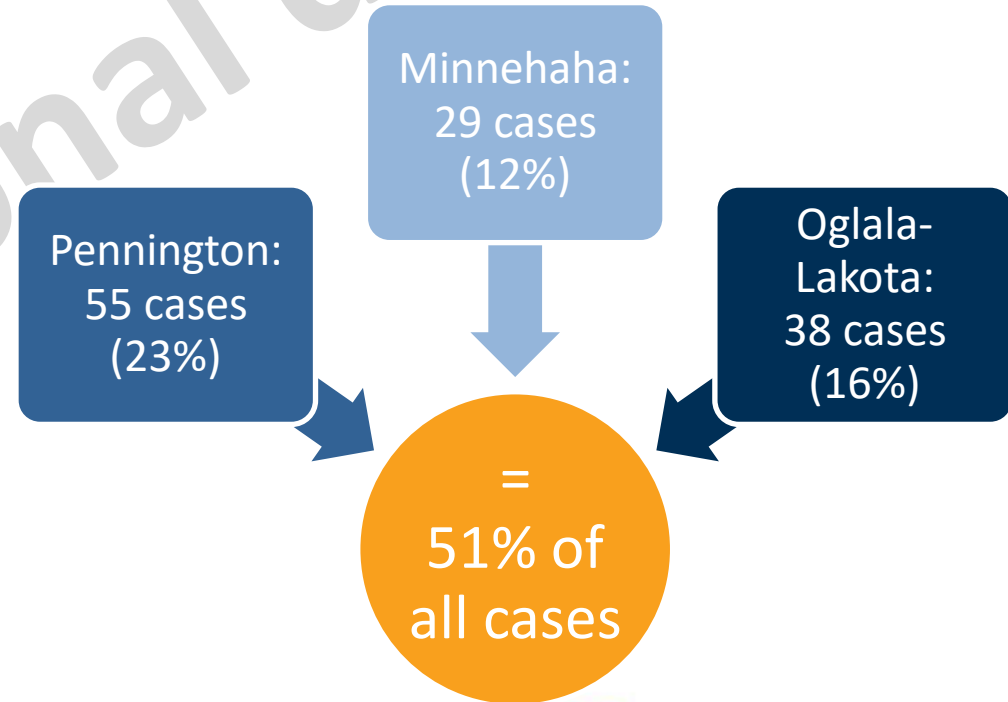


# Top three counties with the highest absolute number of cases

## Previous quarter



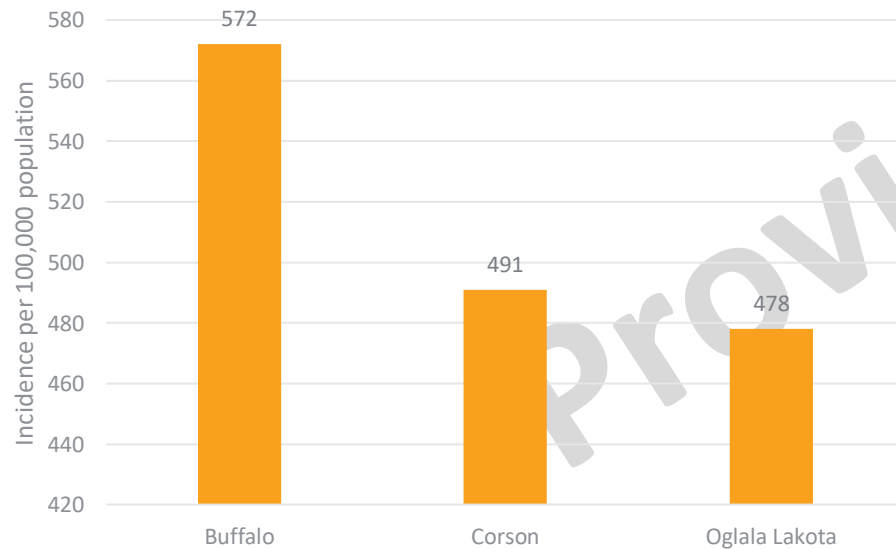
## Current quarter



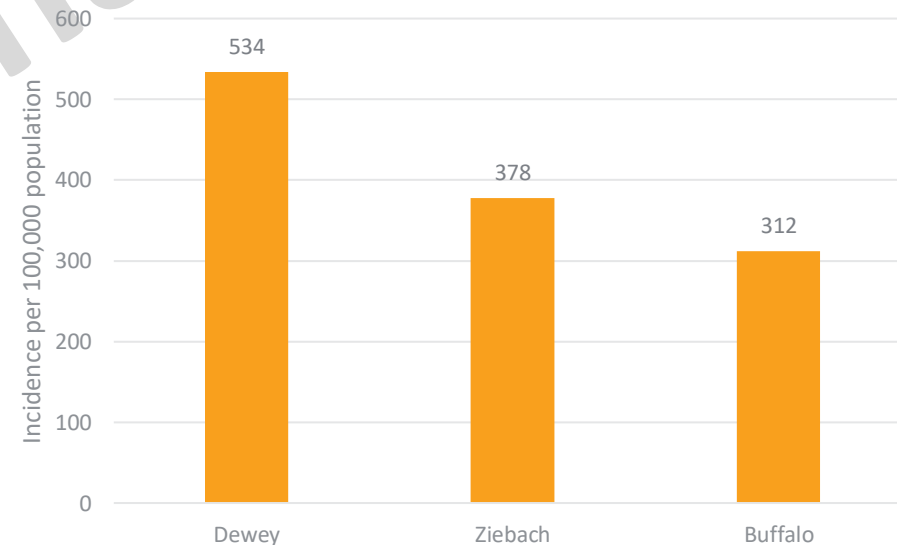


# Top three counties with the highest Incidence per 100,000 inhabitants

## Previous quarter



## Current quarter



# Ongoing clusters of Early syphilis

| 2023, Q2         |                           |                         |         |
|------------------|---------------------------|-------------------------|---------|
| County           | Expected number of cases* | Current number of cases | Surplus |
| Kingsbury County | 0                         | 2                       | 2       |
| Lincoln County   | 3                         | 5                       | 2       |
| Miner County     | 0                         | 1                       | 1       |
| Roberts County   | 2                         | 4                       | 2       |
| Ziebach County   | 6                         | 9                       | 3       |

\*The expected number of cases (or outbreak threshold) was calculated by adding 1.96 standard deviations to the mean of the previous 12 quarters for each county.



SOUTH DAKOTA DEPARTMENT OF HEALTH

# Top three risk factors

## Previous quarter

- 298 (94%) heterosexual contact
- 139 (39%) history of incarceration
- 96 (27%) history of using illicit drugs
- 57 (16%) Jail/Prison/Juvenile detention

## Current quarter

- 205 (96%) heterosexual contact
- 92 (39%) history of incarceration
- 53 (22%) history of using illicit drugs
- 29 (12%) Jail/Prison/Juvenile detention



# Comparing reinfections

## Previous quarter

□ 0 (0%) were reinfected

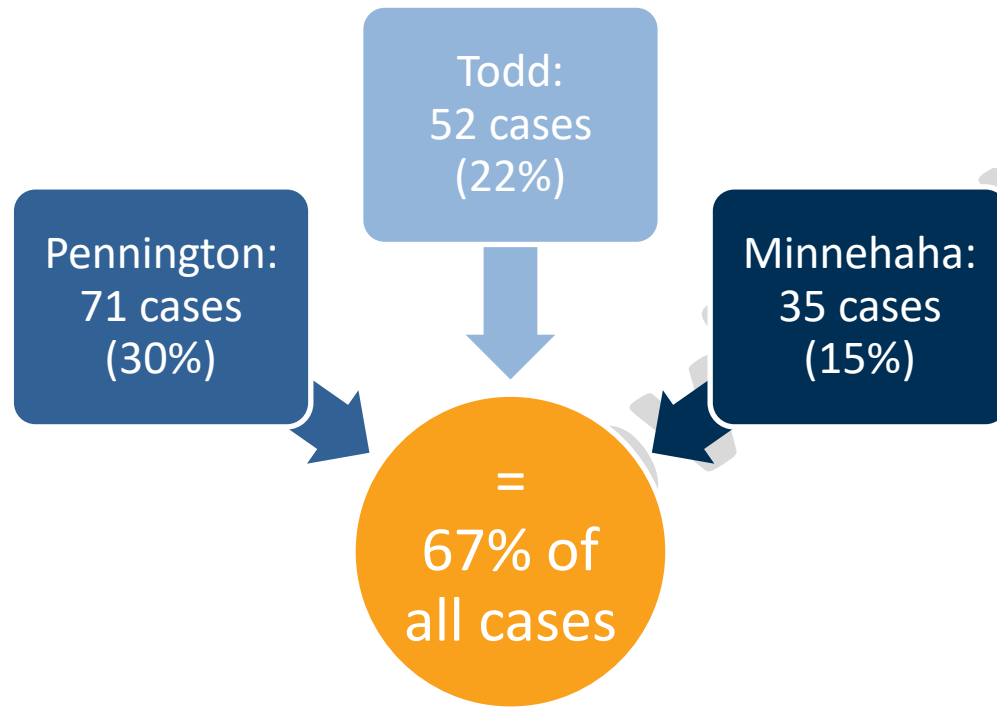
## Current quarter

□ 1 (0.4%) were reinfected

**Total number of reinfections during 2020-2023: 234 (9%)**



# Top three counties with the highest absolute number of reinfected cases detected during 2020-2023



# Characteristics of reinfected cases detected during 2020-2023

## □ Gender

- 124 (53%) females

## □ Age group

- 15-19 years – 14 (6%)
- 20-24 years – 33 (14%)
- 25-39 years – 149 (64%)
- 40-64 years – 37 (16%)

## □ Race

- American Indians– 204 (87%)
- Whites – 19 (8%)

## □ Residence type

- 10 (7%) homeless
- 17 (11%) in jail

## □ Sexual orientation

- 198 (95%) heterosexual



# Coinfected with HIV/AIDS

- Number of coinfecting cases with HIV/AIDS with events dates of syphilis in Q2 of 2023
  - 4 cases
- Number of coinfecting cases with HIV/AIDS diagnosis dates in Q2 of 2023 while syphilis event dates in the past
  - 2 cases
- Number of cases with HIV/AIDS and syphilis dates in Q2 of 2023
  - 0 cases



# County of Residence of Congenital Syphilis Cases

| Previous quarter | Number of cases |
|------------------|-----------------|
| Corson           | 1               |
| Dewey            | 2               |
| Gregory          | 1               |
| Hughes           | 1               |
| Lyman            | 1               |
| Minnehaha        | 1               |
| Oglala Lakota    | 1               |
| Potter           | 1               |
| Todd             | 9               |
| <b>Total</b>     | <b>18</b>       |

| Current quarter | Number of cases |
|-----------------|-----------------|
| Buffalo         | 1               |
| Minnehaha       | 2               |
| Oglala Lakota   | 2               |
| Pennington      | 2               |
| <b>Total</b>    | <b>7</b>        |





# Race of Congenital Syphilis Cases

## □ Current quarter

- American Indian – 7 (100%)

## □ Previous quarter

- American Indian – 16 (89%)
- Black – 1 (6%)
- White – 1 (6%)



# Comment

- Provisional data show decrease in the number of early syphilis case counts, which may not be confirmed until data are closed out
  - Number of congenital syphilis cases is also decreased
- Risk factors and demographics of cases remain the same
  - American Indians heavily affected
- Risk factors and demographics of reinfected cases do not differ significantly from other cases
- Risk factors are based on self-report



# HIV/AIDS in SD

- Cases included in this analysis:
  - Disease status: Confirmed
  - Investigation status: Completed
  - Patients diagnosed in SD
- Data were extracted on July 13<sup>th</sup>, 2023
- Report compares Q2 of 2023 (Apr 1 – Jun 30, 2023) to Q1 of 2023 (Jan 1 - Mar 31, 2023)



# Comparing total number of diagnosis

## Previous quarter

- Number of diagnosis: 16
- HIV: 13
- AIDS: 3

## Current quarter

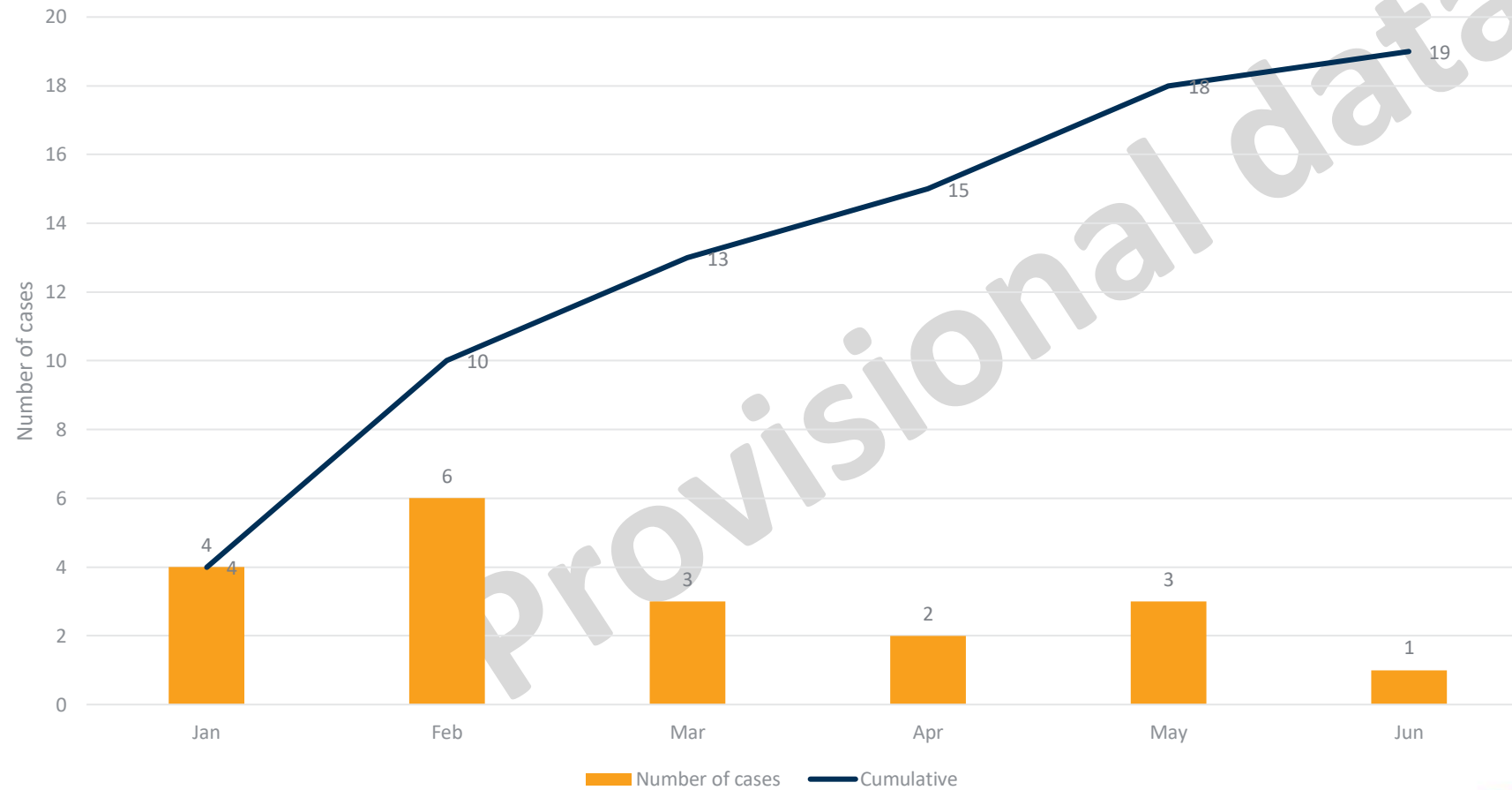
- Number of diagnosis: 10
- HIV: 6
- AIDS: 4

Percent increase/decrease from the previous quarter for HIV and AIDS: -38%↓

Percent increase/decrease from the previous quarter for HIV: -54%↓



# HIV cases by month of diagnosis



# Comparing gender

## Previous quarter HIV

- 5 (38%) females
- 8 (62%) males

## AIDS

- 3 (100%) males

## Current quarter HIV

- 6 (100%) males

## AIDS

- 1 (25%) females
- 3 (75%) males



# Comparing race

## Previous quarter HIV

- 3 (23%) American Indians
- 6 (46%) Whites
- 3 (31%) Blacks

## AIDS

- 1 (33%) Whites
- 2 (67%) American Indians

## Current quarter HIV

- 2 (33%) American Indians
- 4 (67%) Whites

## AIDS

- 2 (50%) White
- 1 (25%) Black
- 1 (25%) American Indians



# Comparing age (HIV and AIDS reported together)

## Previous quarter

- 2 (12%) in the age group of 13-24
- 12 (75%) in the group of 25-39 years old
- 2 (12%) in the group of 40-64 years old
- Median age: 29 years

## Current quarter

- 6 (10%) in the group of 25-39 years old
- 3 (8%) in the group of 40-64 years old
- 1 (10%) in the age group of 65+
- Median age: 37.5 years





# Top three counties with the highest absolute number of cases (HIV and AIDS reported together)

## Previous quarter

Minnehaha:  
7 cases (44%)

Pennington:  
3 cases  
(19%)

Hughes/Yankton: 2  
cases each  
(25%)

=  
88% of  
all cases

## Current quarter

Brookings/Clay/Hamlin/Dewey:  
1 cases each  
(40%)

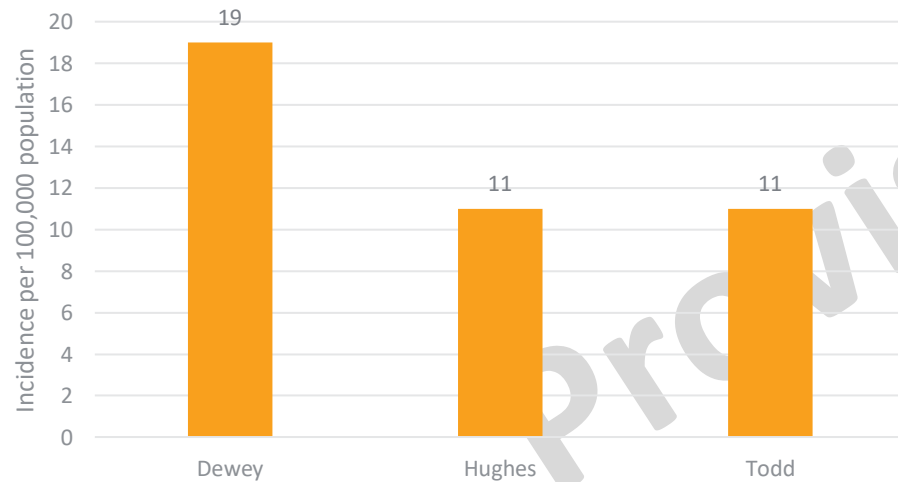
Minnehaha:  
6 cases  
(60%)

=  
100% of  
all cases

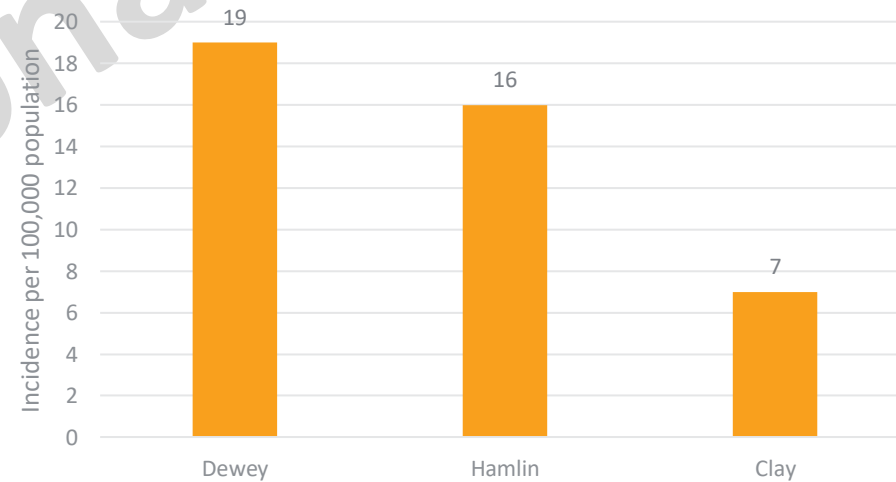


# Top three counties with the highest Incidence per 100,000 inhabitants (HIV and AIDS reported together)

Previous quarter



Current quarter



# Ongoing clusters of HIV

| 2023, Q2 |                           |                         |         |
|----------|---------------------------|-------------------------|---------|
| County   | Expected number of cases* | Current number of cases | Surplus |
| Clay     | 0                         | 1                       | 1       |
| Hamlin   | 0                         | 1                       | 1       |

\*The expected number of cases (or outbreak threshold) was calculated by adding 1.96 standard deviations to the mean of the previous 12 quarters for each county.



SOUTH DAKOTA DEPARTMENT OF HEALTH

# Top three risk factors

## Previous quarter

- 8 (53%) heterosexual contact
- 7 (47%) MSM
- 15 (100%) sex without a condom

## Current quarter

- 5 (50%) heterosexual contact
- 5 (50%) MSM
- 10 (100%) sex without a condom



## Comment

- Provisional data show a slight decrease in number of cases

Provisional data

